Available online at www.sciencedirect.com
ScienceDirect
Geoderma 138 (2007) 273 - 274
GEODERMA
www.elsevier.com/locate/geoderma

Contents Volume 138, 2007

Research papers

Halloysite versus gibbsite: Silicon cycling as a pedogenetic process in two lowland neotropical rain forest soils of La Selva, Costa Rica
M. Kleber, L. Schwendenmann, E. Veldkamp, J. Rößner and R. Jahn . . . 1

Adsorption of a soil humic acid at the surface of goethite and its competitive interaction with phosphate
J. Antelo, F. Arce, M. Avena, S. Fiol, R. López and F. Macías . . . 12

A laser-induced fluorescence spectroscopic study of organic matter in a Brazilian Oxisol under different tillage systems
M. González-Pérez, D.M.B.P. Milori, L.A. Colnago, L. Martin-Neto and W.J. Melo . . . 20

Anisotropy, cracking, and shrinkage of vertisol samples Experimental study and shrinkage modeling
P. Boivin . . . 25

Weathering trends and parent material characteristics of polygenetic oxisols from Minas Gerais, Brazil: I. Mineralogy
C.C. Muggler, P. Buurman and J.D.J. van Doesburg . . . 39

Effect of indigenous cyanobacterial application on structural stability and productivity of an organically poor semi-arid soil
R. Nisha, A. Kaushik and C.P. Kaushik . . . 49

Procedure for quantifying a solute flux to a shallow perched water table
T.J. Gish and K.-J.S. Kung . . . 57

Using expert knowledge with control of false discovery rate to select regressors for prediction of soil properties
R.M. Lark, T.F.A. Bishop and R. Webster . . . 65

Fungal mitigation of soil erosion following burning in a semi-arid Arizona savanna
M.E. O'Dea . . . 79

Optimization of sample patterns for universal kriging of environmental variables
D.J. Brus and G.B.M. Heuvelink . . . 86

Hydric properties of high charge, halloysitic clay soils from the tropical South Pacific region
G. Pochet, M. Van der Velde, M. Vanclooster and B. Delvaux . . . 96

Soil structure and bypass flow processes in a Vertisol under sprinkler and drip irrigation
G. Crescimanno, A. De Santis and G. Provenzano . . . 110

Assessment of soil organic and carbonate carbon storage in China
Z.P. Li, F.X. Han, Y. Su, T.L. Zhang, B. Sun, D.L. Monts and M.J. Plodinec . . . 119

Sorption of glyphosate and phosphate by variable-charge tropical soils from Tanzania
A.L. Gimsing, C. Szilas and O.K. Borggaard . . . 127

Turnover of carbon in the free light fraction with and without charcoal as determined using the ^{13}C natural abundance method
E.W. Murage, P. Voroney and R.P. Beyaert . . . 133

Effects of amendment with treated and untreated olive oil mill wastewaters on soil properties, soil humic substances and wheat yield
G. Brunetti, N. Senesi and C. Plaza . . . 144

Phosphorus sorption by freeze–thaw treated wetland soils derived from a winter-cold zone (Sanjiang Plain, Northeast China)
G.-P. Wang, J.-S. Liu, H.-Y. Zhao, J.-D. Wang and J.-B. Yu . . . 153

Effects of associating a N-fixer species to monotypic oak plantations on the quantity and quality of organic matter in minesoils
T. Chiti, G. Certini, A. Puglisi, G. Sanesi, A. Capperucci and C. Forte . . . 162

Humic acids from hydromorphic soils of the upper Negro river basin, Amazonas: Chemical and spectroscopic characterisation
A.L. Mafra, N. Senesi, G. Brunetti, A.A.W. Miklós and A.J. Melfi . . . 170

Clay mineralogical characterization of a toposequence of perhumid subalpine forest soils in northeastern Taiwan
C.-W. Pai, M.-K. Wang and C.-Y. Chiu . . . 177

Research papers

Self-similar organization of Vertisol microstructure: A pore–solid fractal interpretation
H. Millán, M. González-Posada, A.A. Morilla and E. Pérez . . . 185

Ornithogenic cryosols from Maritime Antarctica: Phosphatization as a soil forming process
F.N.B. Simas, C.E.G.R. Schaefer, V.F. Melo, M.R. Albuquerque-Filho, R.F.M. Michel, V.V. Pereira, M.R.M. Gomes and L.M. da Costa . . . 191

Free atmospheric CO_2 enrichment (FACE) increased respiration and humification in the mineral soil of a poplar plantation
M.R. Hoosbeek, J.M. Vos, M.B.J. Meinders, E.J. Velthorst and G.E. Scarascia-Mugnozza . . . 204

Copper fertilizer effects on copper distribution and vertical transport in soils
W. Xiaorong, H. Mingde and S. Mingan 213
Kinetics of potassium release from illite as influenced by different phosphates
J.M. Zhou and P.M. Huang. 221
Reduction capability of soil humic substances from the Rio Negro basin, Brazil, towards Hg(II) studied by a multimethod approach and principal component analysis (PCA)
R.L. Serudo, L.C. de Oliveira, J.C. Rocha, W.C. Paterlini, A.H. Rosa, H.C. da Silva and W.G. Botero 229
Changes in a Humic Cambisol heated (100–500 °C) under laboratory conditions: The significance of heating time
E. Marcos, R. Tárrega and E. Luis 237
Concentrations and possible sources of polychlorinated biphenyls in the soils of Hong Kong
H.B. Zhang, Y.M. Luo, M.H. Wong, Q.G. Zhao and G.L. Zhang. 244
Interdisciplinarity of hydropedology
M. Kutílek and D.R. Nielsen 252
Estimating soil hydraulic properties of Fengqiu County soils in the North China Plain using pedo-transfer functions
Y. Li, D. Chen, R.E. White, A. Zhu and J. Zhang 261

Erratum
Erratum to "The effects of erosional and management history on soil organic carbon stores in ephemeral wetlands of hummocky agricultural landscapes" [Geoderma 135 (2006) 296–306]
A. Bedard-Haughn 272

Contents Volume 138, 2007 273